



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D350-561-141
Job Sheet 170736



Part No: D350-561-141

Job Qty: 2 ea

Part Name: Single Mirror Installation RH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/19/18

Job Tracking No:

Due Date: 1/26/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG REV N/A IPP A 07.07.26 new issue (DSI9379) EC verified by:JLM IPP rev B 10.02.16 per ecn 10-523
EC verified by: DD IPP Rev:C add pick kit DD 10.03.15 verified by:EC IPP Rev:D 10.09.14 per IIN revD DD
verified by:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	2 Ea	1/26/18	1/26/18	0.00	0.00	Start Up Stores/Pkg-2		W. V. JAN 25 2018
105	Packaging	2 pcs	1/26/18	1/26/18	0.00	0.00	Packaging1-3		FEB 09 2018
110	QC	2 pcs	1/26/18	1/26/18	0.00	0.00	QC4		Smr2
115	DC	2 pcs	1/26/18	1/26/18	0.00	0.00	DC		Smr
120	Packaging	2 pcs	1/26/18	1/26/18	0.00	0.00	Packaging3-1		Smr
130	QC21-FG	2 Ea	1/26/18	1/26/18	0.00	0.00	QC21		FEB 12 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN3-5A	Bolt	12 Ea (6 ea)	90-Start up Operation	5035054
AN3-6A	Bolt	2 Ea (1 ea)	90-Start up Operation	5035053
AN4-10A	Bolt	2 Ea (1 ea)	90-Start up Operation	5035041
AN4-5A	Bolt	6 Ea (3 ea)	90-Start up Operation	5035037
D2011-101	Mirror 6"	2 Ea (1 ea)	90-Start up Operation	5035029
D2012-105	Arm (31.06)	2 Ea (1 ea)	90-Start up Operation	
D2012-107	Clevis	2 Ea (1 ea)	90-Start up Operation	5035028
D2012-111	Bracket	2 Ea (1 ea)	90-Start up Operation	5035027
D2012-115	Bracket, Clevis	2 Ea (1 ea)	90-Start up Operation	5035026
D2022-101	Spacer	4 Ea (2 ea)	90-Start up Operation	5035023
D3629-1	Bracket	2 Ea (1 ea)	90-Start up Operation	5035019
D3635-1	Gasket	2 Ea (1 ea)	90-Start up Operation	5035013
D3646-1	Arm	2 Ea (1 ea)	90-Start up Operation	F160059
D3646-3	Arm	2 Ea (1 ea)	90-Start up Operation	
D4070-041	Clamp	4 Ea (2 ea)	90-Start up Operation	5035007
MS21042L3	Nut	8 Ea (4 ea)	90-Start up Operation	5034724
MS21042L4	Nut	8 Ea (4 ea)	90-Start up Operation	5034723
NAS1149D0363J	Washer	16 Ea (8 ea)	90-Start up Operation	5034721
NAS1149D0463J	Washer	16 Ea (8 ea)	90-Start up Operation	5034720

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>			Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐						
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date : _____	Step #: _____	QTY Effective : _____	MRB (QSI042) Approval																						
Work Order Deviation		Disposition																							
Master Unit 000043 Job No 170736		Job No: 170736 Start up Operation 01/24/18 CHG003 Change No: Operation: Revision: Original Serial #: S035059 PART NO: D350-561-141 Single Mirror Installation RH																							
		Completed By																							
		Lead hand / Supervisor Approval Verification																							
		QC / QA Coordinator Approval																							
		<table style="width:100%;"> <tr> <td style="width:33%;"> Envi Dr Equip Har </td> <td style="width:33%; text-align: center;"> S035059 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL: 1 613 632-5200 Email: sales@dartaero.com www.dartaerospace.com </td> <td style="width:33%;"> <table style="width:100%;"> <tr><td>☐</td><td>Positioned Wrong</td></tr> <tr><td>☐</td><td>Outside Dimensions</td></tr> <tr><td>☐</td><td>Over/Under tolerance</td></tr> <tr><td>☐</td><td>Part Incorrect</td></tr> <tr><td>☐</td><td>Part Lost/Missing</td></tr> <tr><td>☐</td><td>Part Moved</td></tr> <tr><td>☐</td><td>Drawing</td></tr> <tr><td>☐</td><td>Finish</td></tr> <tr><td>☐</td><td>Misread</td></tr> <tr><td>☐</td><td>Turning Sequence</td></tr> </table> </td> </tr> </table>			Envi Dr Equip Har	 S035059 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL: 1 613 632-5200 Email: sales@dartaero.com www.dartaerospace.com	<table style="width:100%;"> <tr><td>☐</td><td>Positioned Wrong</td></tr> <tr><td>☐</td><td>Outside Dimensions</td></tr> <tr><td>☐</td><td>Over/Under tolerance</td></tr> <tr><td>☐</td><td>Part Incorrect</td></tr> <tr><td>☐</td><td>Part Lost/Missing</td></tr> <tr><td>☐</td><td>Part Moved</td></tr> <tr><td>☐</td><td>Drawing</td></tr> <tr><td>☐</td><td>Finish</td></tr> <tr><td>☐</td><td>Misread</td></tr> <tr><td>☐</td><td>Turning Sequence</td></tr> </table>	☐	Positioned Wrong	☐	Outside Dimensions	☐	Over/Under tolerance	☐	Part Incorrect	☐	Part Lost/Missing	☐	Part Moved	☐	Drawing	☐	Finish	☐	Misread
Envi Dr Equip Har	 S035059 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL: 1 613 632-5200 Email: sales@dartaero.com www.dartaerospace.com	<table style="width:100%;"> <tr><td>☐</td><td>Positioned Wrong</td></tr> <tr><td>☐</td><td>Outside Dimensions</td></tr> <tr><td>☐</td><td>Over/Under tolerance</td></tr> <tr><td>☐</td><td>Part Incorrect</td></tr> <tr><td>☐</td><td>Part Lost/Missing</td></tr> <tr><td>☐</td><td>Part Moved</td></tr> <tr><td>☐</td><td>Drawing</td></tr> <tr><td>☐</td><td>Finish</td></tr> <tr><td>☐</td><td>Misread</td></tr> <tr><td>☐</td><td>Turning Sequence</td></tr> </table>	☐	Positioned Wrong	☐	Outside Dimensions	☐	Over/Under tolerance	☐	Part Incorrect	☐	Part Lost/Missing	☐	Part Moved	☐	Drawing	☐	Finish	☐	Misread	☐	Turning Sequence			
☐	Positioned Wrong																								
☐	Outside Dimensions																								
☐	Over/Under tolerance																								
☐	Part Incorrect																								
☐	Part Lost/Missing																								
☐	Part Moved																								
☐	Drawing																								
☐	Finish																								
☐	Misread																								
☐	Turning Sequence																								
<table style="width:100%;"> <tr> <td style="width:33%;"> Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ </td> <td style="width:33%;"> Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ </td> <td style="width:33%;"> Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ OTHER : ☐ </td> </tr> </table>		Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ OTHER : ☐	<table style="width:100%;"> <tr> <td style="width:33%;"> Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ </td> <td style="width:33%;"> Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ </td> </tr> </table>			Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐																
Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ OTHER : ☐																							
Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐																								

Part Specifications
Specifications could not be found.

Plex 1/19/18 7:15 AM dart.lacelle.linda

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Master Unit 000043

Tel (613) 632-5200

Containers on Master Unit 000043				
Serial No	Part No	Customer Part No	Status	Quantity
S035054	AN3-5A	AN3-5A	Allocated	12 0
S035053	AN3-6A	AN3-6A	Allocated	2 0
S035041	AN4-10A	AN4-10A	Allocated	2 0
S035037	AN4-5A		Allocated	2 0
S035029	D2011-101	D2011-101	Allocated	2 0
S035028	D2012-107	D2012-107	Allocated	2 0
S035027	D2012-111		Allocated	2 0
S035026	D2012-115		Allocated	2 0
S035023	D2022-101	D2022-101	Allocated	4 0
S035019	D3629-1		Allocated	2 0
S035013	D3635-1		Allocated	2 0
F160059	D3646-1		Allocated	2 0
S035007	D4070-041		Allocated	4 0
S034724	MS21042L3	MS21042L3	Allocated	8 0
S034723	MS21042L4	MS21042L4	Allocated	8 0
S034721	NAS1149D0363J	NAS1149D0363J	Allocated	16 0
S034720	NAS1149D0463J	NAS1149D0463J	Allocated	16 0

D2012-105 37562 2x
D3646-3 8040811 2x

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								